6GF7A

Dual Triode

With High-Mu Unit and Low-Mu Unit

NOVAR TYPE

For Combined Vertical-Deflection-Oscillator and-Amplifier Service in TV Receivers

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	0.985	amp
Peak heater-cathode voltage (Each unit):		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200[a] max.	volts

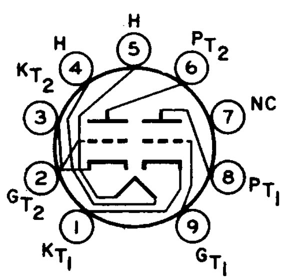
Direct Interelectrode Capacitances (Approx.):

	Unit No.1	*Unit No.2*	
Grid to plate	4.6	9.0	pf
G to (K,H)	2.4	6.5	pf
P to (K,H)	0.26	1.4	pf

Mechanical:

Operating Position	Any
Types of Cathodes	Coated Unipotential
Maximum Overall Length	2.380"
Seated Length	1.750" to 2.000"
Diameter	1.062" to 1.188"
Dimensional Outline	See *General Section*
Bulb	T9
Base	Small-Button Novar, 9-Pin with Exhaust Tip (JEDEC No. E9-89)
Basing Designation for BOTTOM VIEW	9QD

Pin 1 - Cathode of Unit No.1
Pin 2 - Grid of Unit No.2
Pin 3 - Cathode of Unit No.2
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Plate of Unit No.2
Pin 7 - No Internal Connection
Pin 8 - Plate of Unit No.1
Pin 9 - Grid of Unit No.1

Characteristics, Class A_1 Amplifier:

	Unit No.1	*Unit No.2*			
Plate Voltage	250	60	150	250	volts
Grid Voltage	-3	0	-20	-28	volts
Amplification Factor	64	-	5.4	-	
Plate Resistance (Approx.)	40000	-	750	-	ohms
Plate Current	1.4	95	50	10	ma
Grid-Voltage (Approx.) for plate μa = 10	-5.5	-	-	-	volts
100	-	-	-45	-	volts

VERTICAL-DEFLECTION OSCILLATOR

Values are for Unit No. 1

Maximum Ratings, *Design-Maximum Values:*

For operation in a 525-line, 30-frame system[b]

DC Plate Voltage	330	max.	volts
Peak Negative Pulse-Grid Voltage	400	max.	volts
Cathode Current:			
Peak	77	max.	ma
Average	22	max.	ma
Plate Dissipation	1.5	max.	watts

Maximum Circuit Values:

Grid-Circuit Resistance:			
For grid-resistor-bias or cathode-bias operation	2.2	max.	megohms

VERTICAL-DEFLECTION AMPLIFIER

Values are for Unit No. 2

Maximum Ratings, *Design-Maximum Values Except as Noted:*

For operation in a 525-line, 30-frame system[b]

DC Plate Voltage	330	max.	volts
Peak Positive-Pulse Plate Voltage (Absolute-maximum value)[c]	1500[d]	max.	volts
Peak Negative-Pulse Grid Voltage	250	max.	volts
Cathode Current:			
Peak	175	max.	ma
Average	50	max.	ma
Plate Dissipation	11	max.	watts

Maximum Circuit Values:

Grid-Circuit Resistance:			
For grid-resistor-bias operation	2.2	max.	megohms
For cathode-bias operation	2.2	max.	megohms

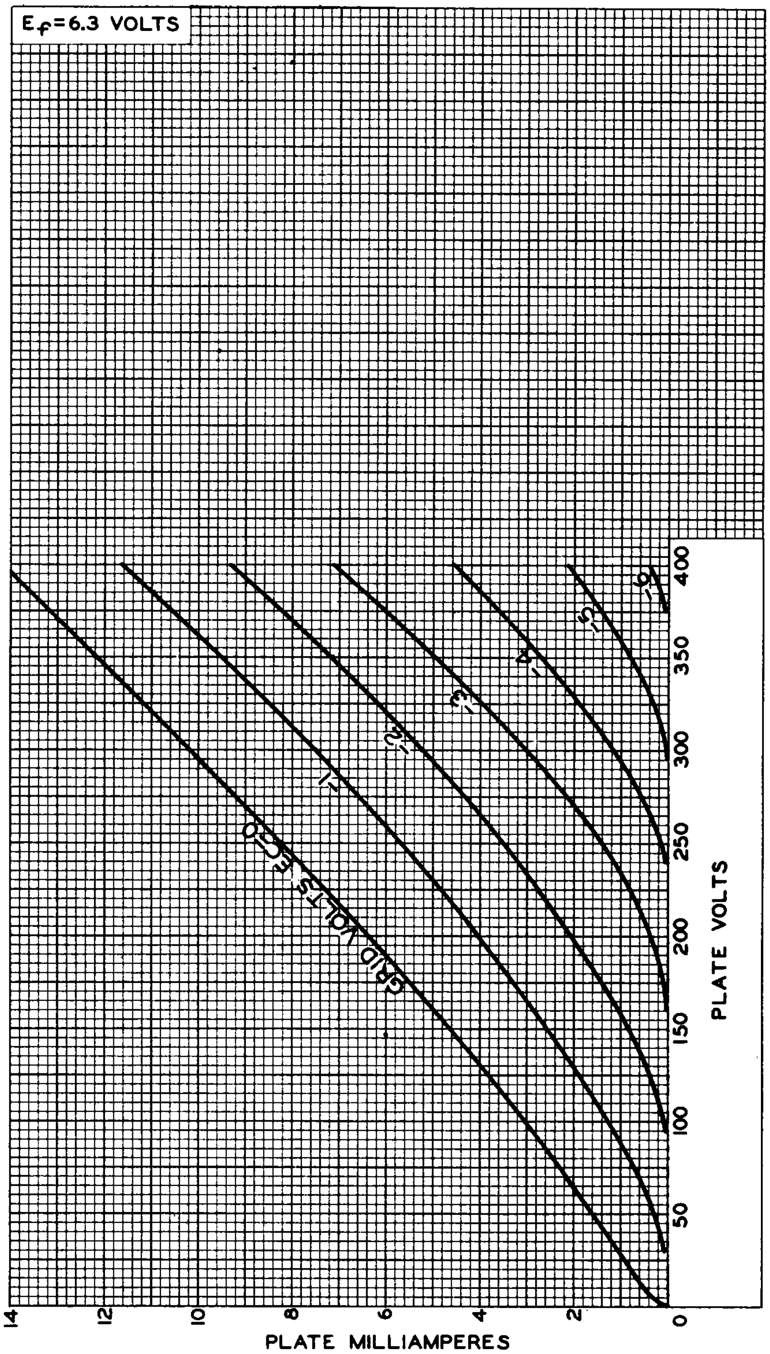
a The dc component must not exceed 100 volts.

b As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations" Federal Communications Commission.

c This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.

d Under no circumstances should this absolute-maximum value be exceeded.

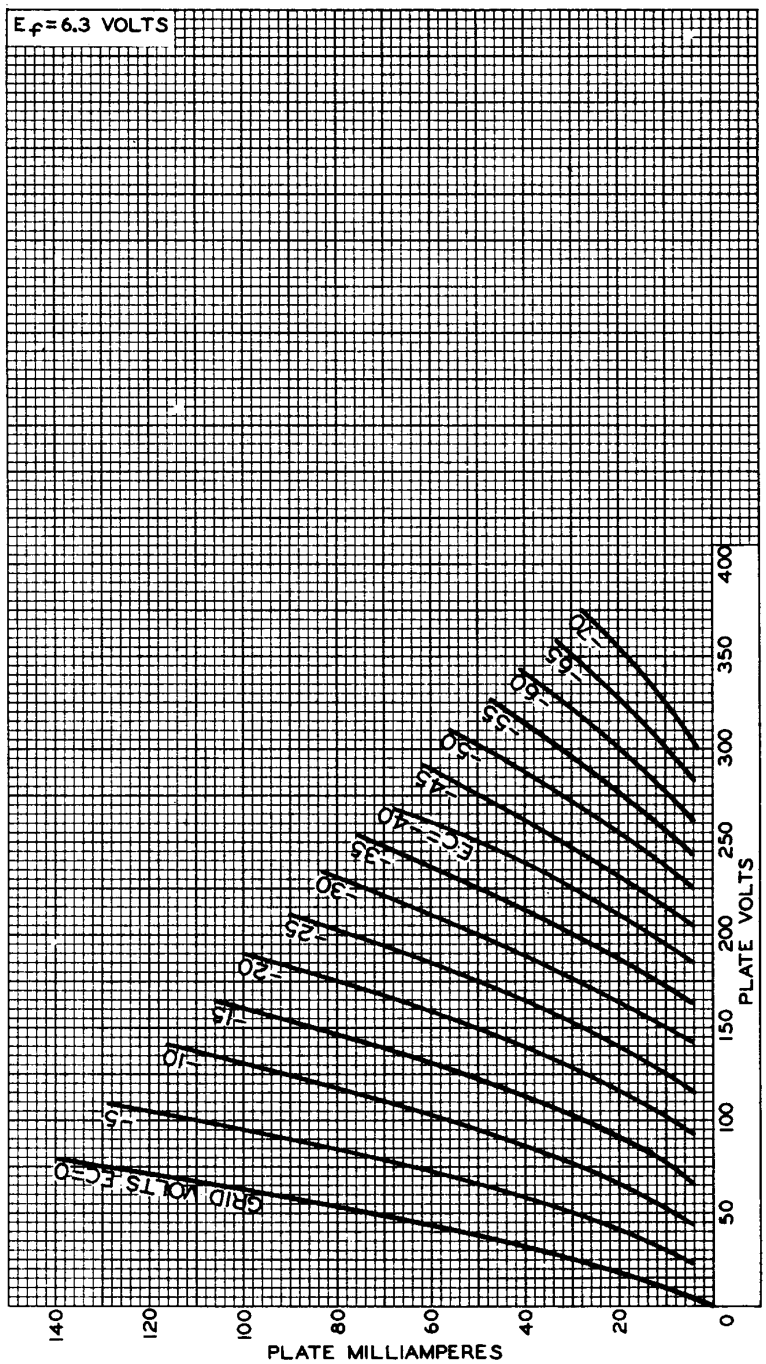
AVERAGE PLATE CHARACTERISTICS
Unit No.1



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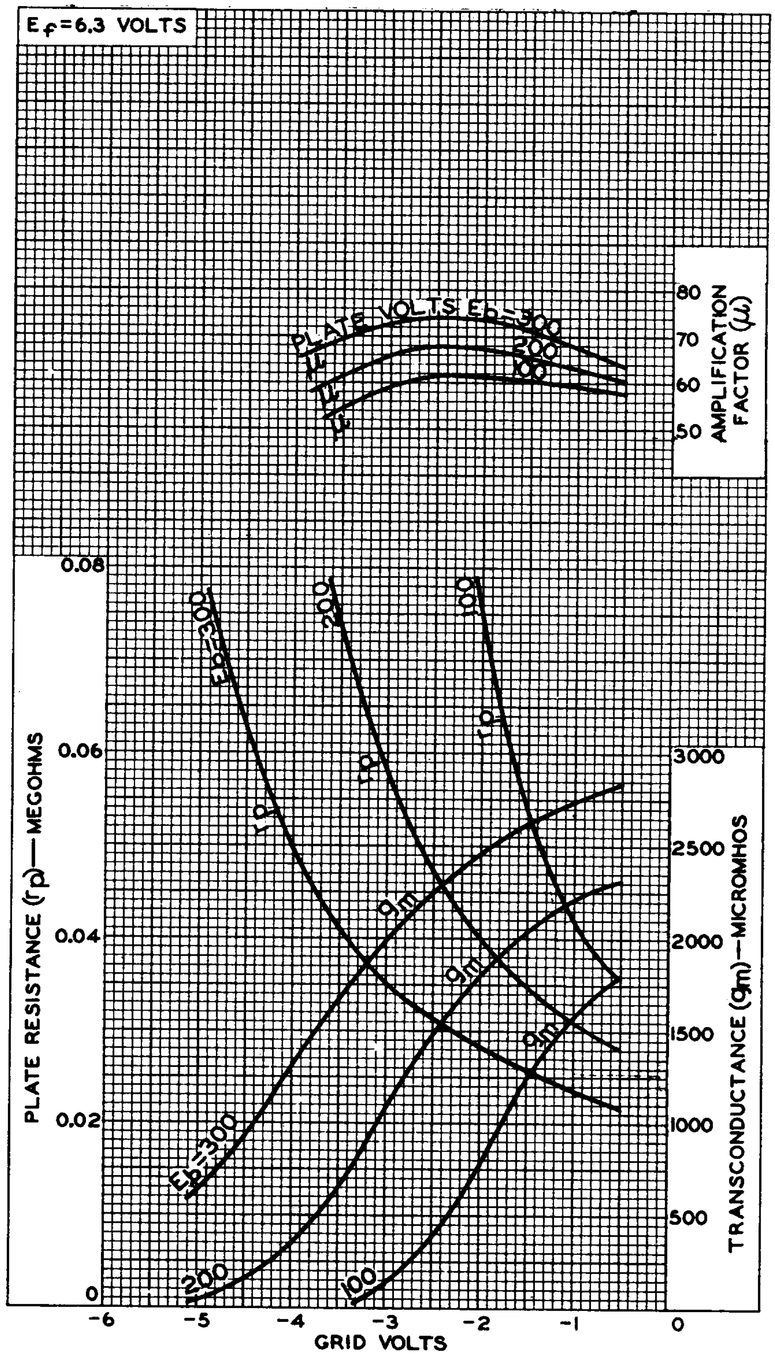
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AVERAGE PLATE CHARACTERISTICS
Unit No.2



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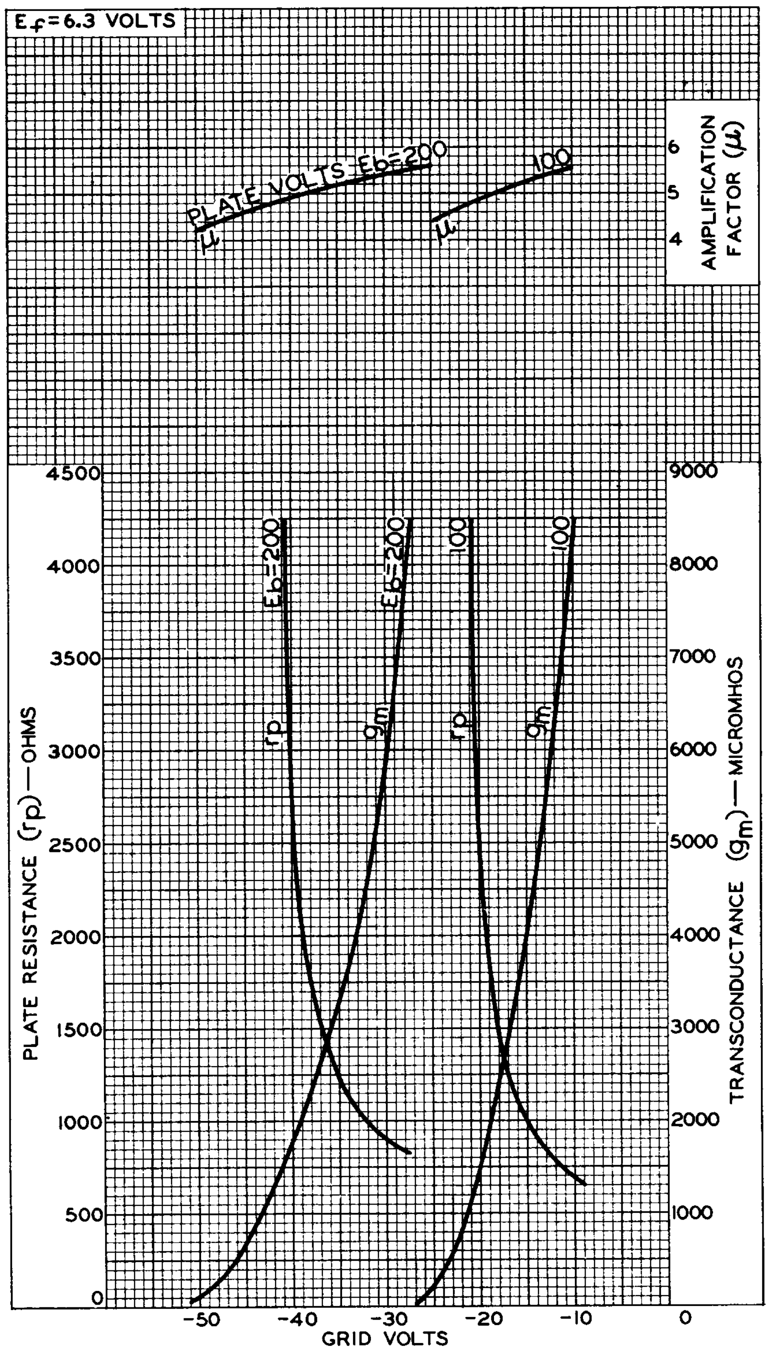
AVERAGE CHARACTERISTICS
Unit No.1



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AVERAGE CHARACTERISTICS
Unit No.2



92CM-10467